

NEWBRIDGE SPECIFIC PLAN PROJECT

OPERATIONAL AIR QUALITY MITIGATION PLAN



PREPARED FOR
EAST SACRAMENTO RANCH, LLC

JULY 10, 2020

PREPARED BY



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Operational Air Quality Mitigation Plan NewBridge Specific Plan Project

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INTRODUCTION AND BACKGROUND

The NewBridge Specific Plan Project (proposed project) is subject to the California Environmental Quality Act (CEQA). Accordingly, Sacramento County, as lead agency, prepared an Environmental Impact Report (EIR) for the proposed project.¹ CEQA requires that EIRs identify and evaluate any significant environmental impacts of a proposed project. The analysis of significant effects must include both direct project impacts and indirect impacts. The analysis must then describe feasible measures that could minimize any significant adverse impacts. To assist in the evaluation of air quality impacts, the Sacramento Metropolitan Air Quality Management District (SMAQMD) developed the *Guide to Air Quality Assessment in Sacramento County* (CEQA Guide).² The CEQA Guide outlines a methodology for calculating project emissions whereby a project is divided into separate construction and operational phases. For each phase, the CEQA Guide establishes significance thresholds related to elevated regional ambient ozone concentrations, which are considered a cumulative impact. Project emissions are compared to these significance thresholds, and mitigation measures are required for projects with emissions exceeding these thresholds.

As part of the CEQA process, the project operational emissions are calculated and impacts are determined in the EIR. According to the Sacramento County General Plan Air Quality Element Policy AQ-4, developments which meet or exceed the adopted SMAQMD thresholds of significance for ozone precursor pollutants shall be deemed to have a significant environmental impact, and an Operational Air Quality Mitigation Plan (AQMP) shall be submitted to the County prior to project approval, subject to review and recommendation as to technical adequacy by SMAQMD. The AQMP shall consist of feasible measures to reduce operational ozone precursor emissions associated with the project and minimize impacts, which would be incorporated as mitigation into the project's EIR. Implementation of the measures set forth in this AQMP would be enforced by the County.

In addition to SMAQMD's requirements that AQMPs include consideration of ozone precursor emissions, SMAQMD further requires that if proposed projects are anticipated to exceed emissions thresholds for particulate matter (PM), then AQMPs prepared for the proposed project should incorporate mitigation for PM emissions. It should be noted that PM emissions are considered for PM that is 10 microns in diameter or smaller (PM₁₀), and PM that is 2.5 microns in diameter or smaller (PM_{2.5}).

To assist in documenting, quantifying, and monitoring the mitigation measures selected by the project proponent, SMAQMD has prescribed that the selected operational mitigation measures be explained in the context of the AQMP. The AQMP is a stand-alone document separate from any other documents or plans required by CEQA or other laws, ordinances, or regulations. During the environmental review process, and before certification of the EIR by the lead agency, SMAQMD independently verifies the technical adequacy of the AQMP. The verified AQMP is then

¹ County of Sacramento Office of Planning and Environmental Review. NewBridge Specific Plan Draft Environmental Impact Report. State Clearing House Number 2013012028.

² Sacramento Metropolitan Air Quality Management District. Guide to Air Quality Assessment in Sacramento County. December 2009 (last revised September 2018). Available at: <http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools>. Accessed March 2019.

referenced in the EIR as an air quality mitigation measure, appended to the EIR, and at the discretion of the lead agency, may be referenced as a separate condition of approval.

The proposed project EIR found that emissions impacts, particularly related to ozone precursors (i.e., reactive organic gases [ROG] and nitrous oxides [NO_x]), associated with the proposed project, were determined to be significant, based upon SMAQMD's adopted thresholds of significance. Thus, an AQMP consistent with SMAQMD's CEQA Guide was prepared and incorporated into the EIR in order to address the significant impacts. The AQMP, prepared by Raney Planning and Management, Inc. (Raney) in June 2015, was prepared in compliance with version 3.0 of SMAQMD's *Recommended Guidance for Land use Emission Reductions*³ and provided air quality impact mitigation measures required to be applied to the proposed project necessary for the project to meet the requirements of CEQA and meet regional air quality goals.

Based on comments received during the public review period for the EIR, as well as due to County-mandated measures for the proposed project as part of the Development Agreement, Raney has prepared an updated AQMP included herein. The updated analysis relies on version 4 of SMAQMD's *Recommended Guidance for Land use Emission Reductions*, which is the current version of SMAQMD's Guidance.⁴

PROPOSED PROJECT SUMMARY

The Proposed Project Summary section includes a discussion regarding the specific location of the proposed project within Sacramento County, as well as the project components.

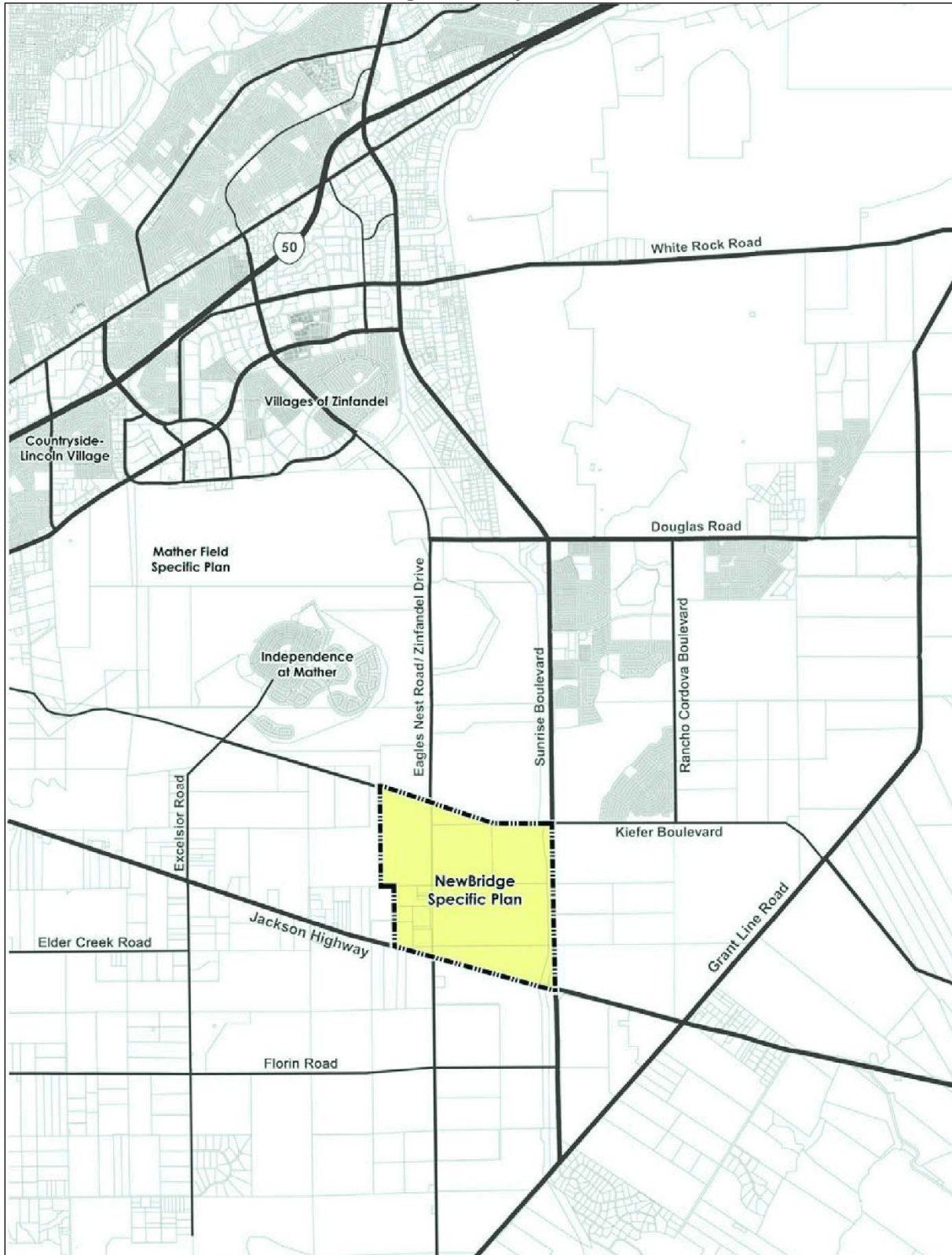
Project Location

The NewBridge Specific Plan project is located within the Vineyard Community of Sacramento County, north of State Route (SR) 16 and south of Kiefer Boulevard, along the Jackson Highway corridor. Figure 1 illustrates the regional location of the project. The project site consists of approximately 1,095 acres and is located in the gently rolling to almost flat portions of the southern and eastern Sacramento Valley at elevations between 126 and 150 feet above sea level. The site is bounded by Kiefer Boulevard to the north, SR 16 to the south, Sunrise Boulevard to the east and undeveloped land to the west. Surrounding land uses include the Mather Airport, Mather Reserve, and Mather South community to the north; an aggregate mine to the south; the proposed Jackson Township Master Plan to the west; and undeveloped lands within the City of Rancho Cordova to the east.

³ Sacramento Metropolitan Air Quality Management District. *Recommended Guidance for Land Use Emission Reductions Version 3.1 (for Operational Emissions)*. June 2014.

⁴ Sacramento Metropolitan Air Quality Management District. *Recommended Guidance for Land Use Emission Reductions Version 4 (for Operational Emissions)*. November 30, 2017.

Figure 1
Regional Project Location



Project Components

The proposed project includes the following entitlements:

1. General Plan Amendments (including changes to the Urban Policy Area, Land Use Designations, Land Use Diagram, Transportation Plan, and Bicycle Master Plan);
2. Community Plan Amendment;
3. Specific Plan Approval (including Land Use Diagram, Design Guidelines, and Development Standards);
4. Affordable Housing Plan;
5. Development Agreement; and
6. Public Facilities Financing Plan.

The proposed project would establish a comprehensive land use and regulatory framework to guide development within the approximately 1,095-acre site. The proposed project's land use summary is presented in Table 1 below. At buildout, the proposed project would provide approximately 3,075 dwelling units, accommodate approximately 8,118 residents, add approximately 500,000 square feet of retail, office, and mixed use space, and provide approximately 2,530 permanent jobs.

Table 1			
Proposed Project Land Use Summary			
Land Use	DU	AC	SF
Low Density Residential	1,124	224.2	
Medium Density Residential	880	106.5	
High Density Residential	911	37.3	
Commercial		20.3	190,000
Mixed Use	160	11.4	130,000
Office		13.8	180,000
Open Space		473.4	
Park		41.3	
Elementary School		9.4	614,200 ²
Sewer Lift Station		0.5	
Electric Facility ¹		1.4	
Fire Station		2.5	163,400 ³
Agriculture		105.4	
Major Roadway		47.9	
TOTAL	3,075	1,095.3	1,277,600
DU = dwelling units AC = acres SF = square footage ¹ Refers to an existing Sacramento Metropolitan Utility District (SMUD) electric facility in the southeast corner of the project site, which would remain with implementation of the proposed project. ² Elementary school square footage based on floor-area-ratio (FAR) of 1.5. ³ Fire station square footage based on FAR of 1.5.			

METHODOLOGY

Per SMAQMD's publication *Recommended Guidance for Land use Emission Reductions*, an unmitigated baseline and a proposed project mitigated operational scenario were modeled, where the unmitigated baseline is the project developed without consideration of any inherent design or site features (e.g., design enhancements, vehicle miles traveled [VMT] reductions, etc.). Although the unmitigated baseline does not take into account project design features, the unmitigated baseline does take into account statewide programs and requirements such as the most recent California Building Standards Code (CBSC), as well as statewide requirements related to the Renewable Portfolio Standards (RPS). The unmitigated baseline was compared to the proposed project "mitigated" operational emissions, which does not necessarily take on the same meaning as under CEQA in this case, but included the project's inherent design and site features that are included as part of the proposed project. The unmitigated baseline and proposed project mitigated total mass emissions of ozone precursors was estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software - a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects.⁵ The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model (e.g., estimated VMT, project-specific trip generation, sustainable design features, County-mandated measures, etc.). The emissions were modeled on an annual basis of the full buildout year, which was estimated to be 2030, but is modeled here as 2032 for this analysis, as a conservative approach considering the anticipated construction schedule. All project modeling results and emissions calculations are included as the appendix to this document.

Project-specific traffic data, particularly the proposed project's anticipated VMT and project-wide trip generation, was provided by the traffic consultant for the project, DKS Associates, and was applied to the project's mitigated operational modeling.

It should be noted that for analysis purposes, for operational year 2032, the modeling has been modified with the assumption that SMUD would, at a minimum, meet the 60 percent statewide RPS goal.

The emissions data obtained as described above were compared to the reduction requirements set forth by SMAQMD in order to determine the project's compliance with SMAQMD's requirements for projects subject to preparation of AQMPs for operational air quality impacts. Mitigation measures are described that would ensure that the proposed project would meet the required reductions from unmitigated levels.

⁵ BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. *California Emissions Estimator Model User's Guide Version 2016.3.2*. October 2017.

Required Reduction Percentage

SMAQMD has developed the *Recommended Guidance for Land use Emission Reductions*, to instruct project proponents how to quantify, apply, and comply with various measures for projects within SMAQMD's jurisdictional area. Projects that are anticipated to emit 65 pounds or more of NO_x or ROG per day, 80 pounds per day (or 14.6 tons/year) or more of PM₁₀, or 82 pounds per day (or 15 tons/year) or more of PM_{2.5} are considered operationally significant for CEQA purposes and should apply feasible mitigation. SMAQMD guidance provides that the creation and implementation of an AQMP is feasible mitigation, provided a reduction of ozone precursors is illustrated to be below an unmitigated project by 15 percent for projects considered in the State Implementation Plan (SIP) and 35 percent for projects not considered in the SIP. For PM₁₀ and PM_{2.5}, SMAQMD does not recommend a percent reduction goal, and instead recommends incorporation of all feasible mitigation measures for projects that exceed the SMAQMD's PM thresholds.

The most recent SIP for the Sacramento region is the *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan*.⁶ As the proposed project has not been anticipated by the County in the General Plan or other community plan, development of the project would not have been included in the growth assumptions of the SIP. Because the SIP takes into account growth assumptions to determine when and how air quality standards could be achieved, emissions that are not accounted for in the SIP have the potential to conflict with the attainment goals set forth in the SIP. As such, a reduction of 35 percent below unmitigated emissions of ozone precursors would be required for the proposed project. According to SMAQMD, a project's ozone precursor emissions reductions goals should be based on mobile emissions only; however, reductions of ozone precursors from non-mobile emission reduction measures (e.g., natural gas or energy reductions) may still be accounted for and applied.

Two types of mitigation measures could be applied - those that are included in CalEEMod (known as on-model measures) and SMAQMD recognized measures that are not directly included in CalEEMod (off-model measures). Both on- and off-model measures are largely based on the California Air Pollution Control Officers Association Quantifying Greenhouse Gas Mitigation Measures (CAPCOA Measures)⁷. Further clarification on the measures can be found in the CalEEMod User Guide the CAPCOA Measures, SMAQMD's CEQA Guide, and SMAQMD's *Recommended Guidance for Land use Emission Reductions*.

The following sections present analyses related to operational emissions of ozone precursors and PM.

⁶ El Dorado Air Quality Management District, Feather River Air Quality Management District, Placer County Air Pollution Control District, Sacramento Metropolitan Air Quality Management District, Yolo-Solano Air Quality Management District. *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan*. July 24, 2017.

⁷ CAPCOA. *Quantifying Greenhouse Gas Mitigation Measures*. August 2010.

OZONE PRECURSOR ANALYSIS

The unmitigated baseline and proposed project mitigated operational emissions are presented below and compared in order to determine if the project would meet the 35 percent reduction of ozone precursors requirement set forth by SMAQMD’s *Recommended Guidance for Land use Emission Reductions*.

Unmitigated Baseline Operational Emissions

Using CalEEMod, the project’s baseline operational emissions were estimated, as shown in Table 2 below.

Table 2		
Unmitigated Baseline Operational Emissions		
Source	ROG (tons/year)	NO _x (tons/year)
Area	35.59	0.36
Energy ¹	0.27	2.90
Mobile	9.93	48.23
Total Unmitigated Baseline Emissions	45.79	51.49
Note:		
¹ Unmitigated emissions of NO _x include emissions resulting from the consumption of grid-supplied electricity.		
Source: CalEEMod, April 2020 (see appendix).		

The unmitigated baseline scenario includes compliance with statewide regulations, but does not include consideration of any specific project design or site features. In particular, improvements in energy efficiency due to the implementation of the 2019 CBSC, as well as reductions in the carbon intensity of grid supplied electricity due to SMUD’s anticipated compliance with statewide RPS standards, were included in the unmitigated baseline emissions estimation.

Although structures within the proposed project are anticipated to exceed the energy efficiency requirements of Title 24, it should be noted that the 2019 CBSC took effect January 1, 2020, and all buildings constructed after January 1, 2020 must be built in compliance with the 2019 CBSC. The 2019 CBSC would result in increased rates of energy efficiency in new buildings, with residential structures achieving a seven percent increase in energy efficiency, while commercial structures would increase energy efficiency by 30 percent, as compared to the 2016 CBSC.⁸ Included in the updates for the 2019 CBSC is a requirement that all new low-rise residential structures (i.e., structures containing three or fewer stories) must include photovoltaic (PV) systems with annual output equal to or greater than the dwelling’s annual electrical usage.⁹ In the case of the proposed project, all proposed single-family residential units would be required to meet the CBSC renewable energy standard. The design standards for the proposed project allow for development of high-density residential structures with three to four stories. Because the ultimate design of the on-site high-density residential structures is unknown at this time, the number of

⁸ California Energy Commission. *2019 Building Energy Efficiency Standards*. March 2018.

⁹ California Energy Commission. *2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking*. April 23, 2018.

future building stories cannot be determined. Accordingly, the inclusion of on-site PV systems is speculative at this time. Due to the uncertainty of future on-site PV systems, this analysis does not assume that the high-density residential structures would include any PV systems. Regardless of the inclusion of PV systems, the high-density structures would achieve the seven percent increase in energy efficiency as compared to similar structures built under the 2016 CBSC.¹⁰ SMUD-generated electricity results in NO_x and ROG emissions through the combustion of fossil fuels. Because production of grid electricity involves the emission of NO_x and ROG, by providing 100 percent on-site electricity for proposed single-family residences, NO_x and ROG emissions related to electricity consumption would be avoided. Furthermore, increased energy efficiency in all other on-site structures due to compliance with the 2019 CBSC would reduce demand for grid-supplied electricity, which would further contribute to reductions in NO_x and ROG emissions. However, because compliance with the CBSC is required for all projects in the State, reductions in NO_x and ROG emissions resulting from increased energy efficiency have not been considered in this AQMP.

Although ROG and NO_x would be emitted from multiple sources during project operations, as directed by SMAQMD's *Recommended Guidance for Land use Emission Reductions*, ozone precursor emissions reductions targets must be established based on mobile-sector emissions only. Therefore, in the case of the proposed project, mobile emissions of ROG and NO_x would be required to be reduced by 35 percent each, for total reductions of 3.47 tons/year of ROG (9.93 tons/year x 0.35 = 3.47 tons/year) and 16.88 tons/year of NO_x (48.23 tons/year x 0.35 = 16.88 tons/year).

Summary of Mitigation Measures and Conditions of Approval

Mitigation measures implemented for the proposed project target two broad categories of emission sources: measures that reduce ozone precursor emissions through reductions in project VMT, and measures that reduce ozone precursor emissions from other, non-VMT related sources. A summary of the mitigation measures implemented as part of the proposed project is presented below.

VMT Related Mitigation Measures

The following features that would provide a reduction in VMT from unmitigated baseline levels were included as part of the project-specific VMT data provided by the traffic consultant and included in the modeling. In cases where the following measures match or substantially conform with the California Air Pollution Control Officers Association's (CAPCOA's) recommended measures, the CAPCOA's mitigation measure numbering is presented for informational purposes.¹¹

- Implementation of Transportation System Management (TSM) Plan projects (TRT-1);
- Consistency with County General Plan Policy LU-120;
- Provides 1,110 multi-family units (36.1 percent of housing stock) in densities greater than 23 units per acre (LUT-1);

¹⁰ California Energy Commission. *2019 Building Energy Efficiency Standards*. March 2018.

¹¹ CAPCOA. *Quantifying Greenhouse Gas Mitigation Measures*. August 2010.

- Overall density of 9.6 dwelling units per acre (LUT-1);
- Bicycle and pedestrian connections throughout site and with surrounding developments (LUT-8 and SDT-1);
- Designed consistent with SACOG Blueprint principles and the sustainability and transportation principles of the MTP/SCS;
- Transit facilities complementary to the bus rapid transit routes planned on Jackson Road and Sunrise Boulevard, including transit routes and stops (LUT-5, TST-1, TST-2, TST-3, and TST-5);
- All residential units are planned within one mile of three amenity categories (public elementary school, parks, and commercial center) (LUT-3);
- 93 percent of the residential units would be within one mile of a fourth amenity category (community garden) (LUT-3);
- 81 percent of the residential units would be within one mile of the office/office employment center (LUT-3);
- Increased diversity via mix of uses (LUT-1);
- 96 percent of the residential units would be within one-half mile walk of a planned transit stop (LUT-5 and TST-2); and
- Project site is within five miles of approximately 62,276 existing jobs in the area, as well as proposed employment uses within project area.

As discussed above, the project-specific VMT and trip generation was provided by the traffic consultant for the project, both of which incorporated the inherent features of the project location and general, overall design, such as the following: anticipated density, mix of uses, circulation design, bicycle and pedestrian network, and proximity to transit and other regional destinations of significance. The project-specific VMT was further adjusted to incorporate the proposed project's implementation of TSM Plan projects. According to the traffic consultant for the project, implementation of TSM Plan projects would result in an additional 2.4 percent reduction in VMT. The 2.4 percent VMT reduction for TSM Plan projects does not account for any of the other measures applied for the proposed project, including Transportation Management Association (TMA) membership. The TMA membership is associated with overall regional benefits (i.e., the entire Highway 50 Corridor) through training and assistance for work site program designs of commuting choices and opportunities; whereas, the TSM Plan projects are project-specific and/or local projects within the immediate surrounding area. Further information regarding TMA membership is provided below.

Both the project-specific VMT and trip generation rate was adjusted and incorporated in CalEEMod. The project-specific VMT was incorporated into CalEEMod by scaling the default trip length values within the model for each land use using a scaling factor based on the difference between the model default annual VMT estimated for the project and the project-specific annual VMT provided by DKS Associates (see the appendix for detailed VMT calculations and the trip length values applied for the project). The project-specific trip generation rate was adjusted and applied to the individual land uses within CalEEMod. Individual trip rates were adjusted proportionally based on the share of total default trips assumed by CalEEMod. Using the proportion of total default trips, the total project-specific trip generation was then assigned per land

use, and the resulting total trip rate estimate by CalEEMod was verified against the total trip generation used by DKS Associates.

The project-specific VMT estimates provided by DKS Associates did not directly account for several factors that could reduce project-related VMT; specifically, the provision of affordable housing opportunities and incorporation of traffic calming measures were not included in the project-specific VMT estimation. Collector streets and residential streets will include traffic calming devices to slow traffic and discourage non-resident traffic in neighborhoods. Such measures slow traffic, reduce the need for stop-sign controlled intersections and provide shorter crossing distances at intersections. Traffic calming measures include such strategies as intersection bulb-outs, lane width restrictions, chicanes, bulbouts, neckdowns and chokers. Specific traffic calming measures will be identified on tentative subdivision maps. The project would include traffic calming measures at five intersections identified along Bridgewater and NorthBridge Drives, which would account for approximately 25 percent of the total project intersections. Approximately 462 total affordable housing units would be provided by the project. Both of the features would contribute to the overall reduction in project-specific VMT.

In addition to the foregoing VMT measure, the proposed project would include permanent membership and funding toward the 50 Corridor TMA (or other appropriate established TMA in effect at the time of building permit in the project area). The 50 Corridor TMA provides advocacy by monitoring issues that impact the Highway 50 Corridor. In addition, through membership, the TMA provides ongoing training and special assistance for members for the implementation of commute alternative programs at work sites, including monthly networking meetings and assistance with work site program design. The 50 Corridor TMA works through a member's chosen Commuter Coordinator to reach out to employees in an effort to provide valid commute choices, including bicycle and vanpool subsidies, vanpool formation assistance, and transit information.

The project applicant would be required to provide verification of compliance with the 50 Corridor TMA (or other appropriate established TMA in effect at the time of building permit in the project area), including, but not limited to, a copy of the agreement/final commitment of the proposed project to ongoing membership through a non-revocable funding mechanism to the 50 Corridor TMA. Verification would be performed by consultation with the funding oversight agency and project's lead agency to ensure that building occupants are maintaining the project applicant's commitments. Membership in the 50 Corridor TMA would likely contribute to project-wide reductions in VMT.

Although the incorporation of affordable housing, implementation of traffic calming and anti-idling measures, and membership in the 50 Corridor TMA would all contribute to reductions in project-specific VMT, CAPCOA maintains maximum VMT reduction caps for proposed projects. In recognition of CAPCOA's VMT reduction caps, the foregoing measures were not specifically included in the CalEEMod emissions modeling, but rather were assumed to contribute to the VMT reductions already accounted for by DKS Associates.¹²

¹² CAPCOA. *Quantifying Greenhouse Gas Mitigation Measures* [Table 6-2]. August 2010.

Anti-Idling/Congestion Strategies

Anti-Idling/Congestion Strategies for roadways reduce vehicle idling by implementing strategies that reduce or remove impediments to the free flow of motor vehicles. Strategies include installation of roundabouts, removal of four-way stop signs, diverging diamond intersections, permissive-protective left-turns, etc., and are applicable for ozone precursor emission reductions of all land use projects that include roadways or intersections. The proposed project roadway circulation system is designed to maximize efficiency for automobiles and enable safe movement for bicyclists and pedestrians. Locations of traffic signals, traffic circles, and calming measures are identified and planned for movements along arterial and collector roadways, which would enhance the efficiency of traffic flow and minimize interruptions to landscaped medians. Traffic circles or roundabouts are identified at intersections along arterials and collectors. A two-lane traffic circle is planned at the entrance to the proposed project site at Kiefer Boulevard and Bridgewater Drive, and three single-lane traffic circles are planned at other locations where controls are needed.

Project-specific traffic volumes and projected idling times are not available at this time, and, nonetheless, would include the project's incorporation of the traffic circles. In addition, an industry standard for the typical or average percent reduction in vehicle emissions associated with the improvement of an intersection to a traffic circle or roundabout from a traditional signalized intersection does not currently exist. As such, an accurate account of the reduction of the potential vehicle emissions associated with future project traffic due to the incorporation of traffic circles rather than traditional signalized intersections would be difficult to determine at this time. Accordingly, emissions reductions from this measure have not been quantified.

Regional Trail Connection

The Folsom South Canal and parallel bike/equestrian trail are located immediately west of and adjacent to Sunrise Boulevard within and along the eastern edge of the project site. The trail is a paved service road that extends from Lake Nimbus south for a distance of approximately 26 miles and is a regional amenity that links the American River Parkway south to Sloughhouse Road. As such, the trail provides access north and south of the project site and links to regional trails and recreation amenities. Within the project site, Class I bikeways would link to the trail at three locations and would create a five-mile bikeway loop through the project site. Providing a connection to the Folsom South Canal would link local bicycle and pedestrian paths to a regional amenity.

The proposed project design emphasizes pedestrian and bicycle connections between uses and minimizes barriers among uses. All residential units are within 1,000 feet of a neighborhood park, open space, elementary school, and/or bicycle/pedestrian trail. The proposed project would not only encourage pedestrian and bicycle movement within the project site and provide linkages among the internal land uses, but would also provide linkages to other external existing and planned pedestrian and bicycle facilities in the area, as well as other future amenities in the area and regional destinations.

The proposed project would provide a destination for existing and future trail users to stop, rest, shop, dine, etc. Because the existing Folsom South Canal trail connects to other regional trails, the improvements and connections to the trail would likely increase and encourage usage of the regional trail system as well as encourage other future development in the region to further increase connections to the trail system in order to allow connections between developments and other regional destinations. The proposed project is coordinating with the Reclamation District to provide a connection and improvements to the Folsom South Canal trail. All nearby existing and future development in the area could benefit from the project improvements to the trail, which could be considered an amenity. Accordingly, the proposed project would set precedence for future development to provide additional improvements and connections to the regional trail system. Therefore, use of the regional trail system would likely continue to increase over time, which would result in an overall long-term reduction in regional vehicle trips and associated regional emissions.

Although the proposed project's bicycle/pedestrian connections within the site and connecting off-site have been applied to the modeling, the project would contribute towards a greater overall regional benefit to air quality that is not necessarily accounted for in the traffic modeling. Existing counts of trail usage in the area is not currently available and little research has been done locally for the effects of providing regional trail connections on vehicle usage and associated emissions. As such, an estimate of the increase in regional trail usage as a result of the proposed project, as well as the related decrease in vehicle trips and associated emissions, would be speculative at this time. Accordingly, emissions reductions from this measure have not been quantified.

Non-VMT Related Mitigation Measures

County Conditions of Approval (COA) require that all new development within the NewBridge Specific Plan area meet 75 percent of the Tier 2 requirements for the California Green Building Code (CalGreen), include electric vehicle charging infrastructure, and be constructed without inclusion of infrastructure necessary to support natural gas. Additional requirements from the CBSC and project-specific mitigations are discussed below.

County COA Requirements

Sacramento County has included several measures in the proposed Conditions of Approval (COA), for the proposed project, that would act to reduce operational GHG emissions. Measures included in the County's COAs would require the proposed project to incorporate design measures from the CalGreen Tier 1 and 2 requirements. The incorporation of such measures would result in energy and water efficiency improvements. Project emissions modeling was adjusted to reflect the incorporation of low-flow, water conserving plumbing features.

Furthermore, the COAs require that the proposed project include electric vehicle charging equipment in all proposed non-residential and residential developments. The provision of electric vehicle charging infrastructure would support California's Advanced Clean Car Program, which promotes the use of electric vehicles within the State and the growing popularity of such vehicles.¹³

¹³ California Energy Commission. *Zero-Emission Vehicles and Infrastructure*. July 5, 2017.

Currently, California's Advanced Clean Car Program is supported by various strategies including rebates for the purchase of electric vehicles as well as requirements in the CalGreen Code that mandate the construction of backbone infrastructure sufficient to allow subsequent installation of functioning electric vehicle charging facilities.¹⁴ The County's COA exceeds the existing CalGreen Code requirements by mandating the installation of electric vehicle ready infrastructure. Development of the project with electric vehicle ready spaces exceeds the Tier 1 and Tier 2 standards of the CalGreen Code and will provide significant and tangible support for the proliferation of electric vehicles at the project site. Because the electric vehicle charging requirements included in the CalGreen Code are intended to support the State's goals of electric vehicle proliferation, by exceeding the CalGreen Code requirements, it can be concluded that the project would support increased levels of on-site electric vehicle usage, at levels that would exceed what would otherwise occur under existing state requirements. The CARB's estimates of future vehicle emissions, such as those included in some EMFAC outputs and CalEEMod, are predicated on implementation of the Advanced Clean Car Program; thus, by exceeding the existing standards for electric vehicle charging infrastructure the project could result in greater proliferation of electric vehicles within the project site. Although provision of electric vehicle charging infrastructure is understood to result in increased use of electric vehicles, estimation of the degree to which the electric vehicle charging infrastructure required for the project would contribute to additional electric vehicle proliferation within the project site is difficult and somewhat speculative. For instance, assumptions must be made regarding the usage amounts for public charging stations, the electric charging capacity of electric vehicles, and the potential for a higher proportion of residents to use electric vehicles than would otherwise occur under existing regulations. Although such assumptions may be made and supported, in the case of the proposed project, this analysis assumes that the County's COA would result in electric vehicle usage in-line with the Advanced Clean Car Program, but does not assume any greater degree of proliferation of electric vehicles. Consequently, the analysis presented within this AQMP is considered conservative.

While the potential increase in the proliferation of electric vehicle use resulting from installation of electric vehicle charging infrastructure in compliance with the County's COA has not been quantified for this AQMP, to ensure that the proposed project would meet the requirements of the County's COA, the Greenhouse Gas Reduction Plan (GHGRP) prepared for the proposed project includes mitigation with specific performance standards. The requirements of the GHGRP are hereby incorporated into this AQMP by reference. Nevertheless, due to the uncertainty related to increased use of electric vehicles within the project site, emissions modeling for the proposed project was not altered to reflect any increased use of electric vehicles beyond what is already assumed in CalEEMod.

No Natural Gas Systems On-Site

Features of a structure's envelope that use natural gas, such as water heaters and space heaters, as well as appliances that use natural gas, such as cooking equipment and clothes dryers, emit NO_x and ROG during operation. In order to reduce NO_x and ROG, as well as GHG, emissions from

¹⁴ California Air Resources Board. *Draft: Assessment of CARB's Zero-Emissions Vehicle Programs Per Senate Bill 498*. December 17, 2019.

project operations, installation of infrastructure necessary to supply natural gas to future on-site residential developments has been prohibited by Sacramento County. As a result, all proposed residential uses within the project site would be developed using all-electric appliances, as well as all-electric space heating systems and water heating systems. Compared to the on-site combustion of natural gas, the use of electricity for all future on-site appliances and building envelope features within residential developments represents a much less emissions-intensive source of energy. Reductions in the use of natural gas, through the replacement of appliances that would otherwise be fueled by natural gas with all-electric appliances, would result in increases in the consumption of electricity.¹⁵

Although electricity is a much less emissions-intensive source of energy, as compared to natural gas, until SMUD reaches 100 percent renewably sourced electricity, the consumption of electricity will continue to result in emissions of NO_x and ROG. In order to comply with statewide RPS requirements, SMUD is continually reducing the emissions intensity of grid-supplied electricity through development of renewable energy systems; thus, electricity consumed on-site is anticipated to become less emissions-intensive with time, eventually being fully renewably sourced by the year 2045. The net effect of prohibiting natural gas consumption on-site would be a reduction in NO_x and ROG emissions from the use of natural gas on-site, but a short-term increase in NO_x and ROG related to increased on-site electricity consumption.

Emissions resulting from the decreased use of natural gas on-site, as well as increased electricity consumption, has been calculated for the proposed project. It should be noted that while CalEEMod calculates emissions of NO_x and ROG from the combustion of natural gas, CalEEMod does not calculate NO_x and ROG from electricity consumption. Sufficient data is available to calculate emissions of NO_x resulting from the consumption of SMUD-provided electricity. As such, unmitigated and mitigated emissions of NO_x were calculated and considered in this analysis, but sufficient data to allow for similar calculations for ROG emissions was not available.

Proposed Project On-Model Mitigated Operational Emissions

The above described on-model measures would result in total mitigated operational emissions of ozone precursors as shown in Table 3 below. It should be noted that Table 3 compares emissions from all operational sources before and after the implementation of on-model mitigation measures. As discussed previously, per SMAQMD's *Recommended Guidance for Land Use Emission Reductions*, while emissions reductions targets should be set based solely on mobile-sourced emissions from project operations, the project's achieved emissions reductions should be calculated based on total project emissions.¹⁶ Therefore, the estimated emissions and the achieved

¹⁵ California Commercial. *End Use Survey, Annual Summary Statistics*. Available online at <http://capabilities.itron.com/CeusWeb/Chart.aspx>. Accessed February 2020.
California Energy Commission. *California Residential Appliance Saturation Study, Volume 2: Study Results*. Accessible online at https://webtools.dnvgl.com/RASS2009/Uploads/2009_RASS_Volume%20FINAL_101310.pdf. Accessed April 2020.

¹⁶ Sacramento Metropolitan Air Quality Management District. *Recommended Guidance for Land Use Emission Reductions Version 4 (for Operational Emissions)* [pg. 5]. November 30, 2017.

emissions reductions presented in Table 3 represent emissions from all operational sources, not just the mobile sourced emissions.

Table 3		
Proposed Project On-Model Mitigated Operational Emissions		
Modeling Scenario	ROG (tons/year)	NO_x (tons/year)
Unmitigated Baseline	45.79	51.49
Proposed Project Mitigated	41.84	31.71
Emissions Reductions Achieved	3.95	19.78

Source: CalEEMod, April and July 2020 (see appendix).

As shown in Table 4, the on-model measures would reduce NO_x emissions by 19.90 tons/year, and ROG emissions by 3.97 tons/year. Thus, the on-model measures alone would be sufficient to adequately reduce ozone precursor emissions.

Table 4		
Total Reduction From Baseline Due to On-Model Mitigation Measures		
	ROG (tons/year) or %	NO_x (tons/year) or %
Total Reduction from Baseline	3.95	19.78
Percent Reduction from Unmitigated Baseline	40%	41%
REDUCTION REQUIRED	35% or 3.47	35% or 16.88

Considering that the on-model measures alone are sufficient to reduce operational emissions by the required 35 percent, further mitigation is not necessary.

Ozone Precursor Conclusion

Based on the above analysis, the proposed project would result in a total reduction from unmitigated baseline ROG and NO_x of 35 percent or greater, which meets the reduction requirements set forth by SMAQMD.

PM ANALYSIS

SMAQMD's operational thresholds for PM pollution are presented in Table 5 below.

Table 5			
SMAQMD Operational Thresholds for PM			
PM₁₀ (lbs/day)	PM₁₀ (tons/yr)	PM_{2.5} (lbs/day)	PM_{2.5} (tons/yr)
80	14.6	82	15

Source: Sacramento Metropolitan Air Quality Management District. Guide to Air Quality Assessment in Sacramento County. December 2009 (last revised September 2018). Available at: <http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools>. Accessed March 2019.

While SMAQMD's *Recommended Guidance for Land Use Emission Reductions* does not require AQMP's to meet specific reduction targets for PM emissions, SMAQMD does require that all feasible mitigation be incorporated to reduce a project's PM emissions. Table 6 below presents the unmitigated baseline PM emissions that would result from project operations, and demonstrates

that the majority of PM emissions are due to mobile sources. The on-model mitigation measures applied to the proposed project to reduce ozone precursor emissions are primarily focused on reducing project-related VMT. Because PM emissions are primarily mobile-sourced, reducing VMT for ozone precursor emissions would simultaneously act to reduce PM emissions.

Table 6				
Unmitigated Operational PM Emissions				
	PM₁₀ (lbs/day)	PM₁₀ (tons/yr)	PM_{2.5} (lbs/day)	PM_{2.5} (tons/yr)
Total	420.33	62.65	115.41	17.25
Mobile-Sourced	417.89	62.64	112.97	16.89
Percent Mobile-Sourced	99.42%	99.42%	97.89%	97.89%

Source: CalEEMod, April 2020 (see appendix).

Application of the on-model mitigation measures presented above would result in a total reduction of PM emissions as shown in Table 7 below. As shown in the table, on-model mitigation measures applied to the proposed project would achieve significant reductions in PM emissions. In addition, the measures related to anti-idling/congestion management, regional trail connections and TMA membership, which would all reduce VMT, would contribute further PM emissions reductions from the reductions presented in Table 7. However, because SMAQMD's *Recommended Guidance for Land Use Emission Reductions* does not provide methodology for calculating the PM emissions reductions that would result due to the foregoing VMT reductions, such reductions cannot be calculated at this time. Nevertheless, application of the on-model and off-model mitigation measures included in this AQMP would reduce PM emissions related to operations of the proposed project to the maximum extent feasible.

Table 7				
Total Reduction of Baseline Emissions Due To On-Model Mitigation Measures				
	PM₁₀ (lbs/day)	PM₁₀ (tons/yr)	PM_{2.5} (lbs/day)	PM_{2.5} (tons/yr)
Baseline Emissions	420.33	62.65	115.41	17.25
Mitigated Emissions	262.36	31.46	71.16	8.70
Total Reduction from Baseline	157.98	31.19	44.24	8.56
PERCENT REDUCTION¹	38%	50%	39%	51%

Source: CalEEMod, April and July 2020 (see appendix).

PM Conclusion

As shown in Table 7, application of all on-model mitigation measures would result in substantial reductions in anticipated PM emissions. Considering the on-model mitigation measures applied to the proposed project, as well as the additional VMT-reducing measures that were not quantified at this time, PM emissions related to the proposed project would be mitigated to the maximum extent feasible and the proposed project would comply with SMAQMD's *Recommended Guidance for Land use Emission Reductions*.

EMISSIONS ESTIMATION AND CALCULATIONS

UNMITIGATED EMISSIONS OUTPUTS

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Annual

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE
Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	193	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips -

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	T24E	511.12	475.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	319.12
tblEnergyUse	T24NG	9,411.72	8,752.90
tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	10,879.41
tblLandUse	GreenSpaceAllowEdit	1.00	0.00

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tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Energy	0.2731	2.3664	1.2346	0.0149		0.1887	0.1887		0.1887	0.1887						
Mobile	9.9260	48.2252	121.5199	0.5415	61.9630	0.3212	62.2843	16.5923	0.2986	16.8909						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
Total	45.7864	50.9564	154.3989	0.5581	61.9630	0.6858	62.6489	16.5923	0.6632	17.2555						

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	:: :: ::
Total	

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

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3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

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3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.9260	48.2252	121.5199	0.5415	61.9630	0.3212	62.2843	16.5923	0.2986	16.8909						
Unmitigated	9.9260	48.2252	121.5199	0.5415	61.9630	0.3212	62.2843	16.5923	0.2986	16.8909						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,057.89	7,668.36	6500.97	26,022,768	26,022,768
City Park	78.06	939.58	691.36	780,546	780,546
Elementary School	9,477.11	0.00	0.00	21,231,004	21,231,004
General Office Building	1,985.40	442.80	189.00	4,564,803	4,564,803
Government Office Building	11,263.16	0.00	0.00	17,220,952	17,220,952
Regional Shopping Center	13,664.00	15,990.40	8076.80	26,920,417	26,920,417
Single Family Housing	19,078.08	19,859.64	17274.48	69,727,859	69,727,859
Total	62,603.70	44,900.78	32,732.61	166,468,350	166,468,350

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3
City Park	15.00	7.50	8.50	33.00	48.00	19.00	66	28	6
Elementary School	15.00	7.50	8.50	65.00	30.00	5.00	63	25	12
General Office Building	15.00	7.50	8.50	33.00	48.00	19.00	77	19	4
Government Office Building	15.00	7.50	8.50	33.00	62.00	5.00	50	34	16
Regional Shopping Center	15.00	7.50	8.50	16.30	64.70	19.00	54	35	11
Single Family Housing	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000						
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	0.2731	2.3664	1.2346	0.0149			0.1887	0.1887		0.1887	0.1887						
NaturalGas Unmitigated	0.2731	2.3664	1.2346	0.0149			0.1887	0.1887		0.1887	0.1887						

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Apartments Low Rise	1.22521e+007	0.0661	0.5646	0.2402	3.6000e-003		0.0457	0.0457		0.0457	0.0457							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	6.6825e+006	0.0360	0.3276	0.2752	1.9700e-003		0.0249	0.0249		0.0249	0.0249							
General Office Building	1.6866e+006	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003							
Government Office Building	1.53106e+006	8.2600e-003	0.0751	0.0630	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003							
Regional Shopping Center	1.3024e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003							
Single Family Housing	2.71871e+007	0.1466	1.2527	0.5331	8.0000e-003		0.1013	0.1013		0.1013	0.1013							
Total		0.2731	2.3664	1.2346	0.0149		0.1887	0.1887		0.1887	0.1887							

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.22521e+007	0.0661	0.5646	0.2402	3.6000e-003		0.0457	0.0457		0.0457	0.0457						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Elementary School	6.6825e+006	0.0360	0.3276	0.2752	1.9700e-003		0.0249	0.0249		0.0249	0.0249						
General Office Building	1.6866e+006	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003						
Government Office Building	1.53106e+006	8.2600e-003	0.0751	0.0630	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003						
Regional Shopping Center	1.3024e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003						
Single Family Housing	2.71871e+007	0.1466	1.2527	0.5331	8.0000e-003		0.1013	0.1013		0.1013	0.1013						
Total		0.2731	2.3664	1.2346	0.0149		0.1887	0.1887		0.1887	0.1887						

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.7751e+006				
City Park	0				
Elementary School	4.12128e+006				
General Office Building	2.331e+006				
Government Office Building	2.11603e+006				
Regional Shopping Center	3.3888e+006				
Single Family Housing	1.62002e+007				
Total					

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.7751e+006				
City Park	0				
Elementary School	4.12128e+006				
General Office Building	2.331e+006				
Government Office Building	2.11603e+006				
Regional Shopping Center	3.3888e+006				
Single Family Housing	1.62002e+007				
Total					

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Unmitigated	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.3533					0.0000	0.0000		0.0000	0.0000						
Consumer Products	30.2865					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	0.9475	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Total	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.3533					0.0000	0.0000		0.0000	0.0000						
Consumer Products	30.2865					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	0.9475	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Total	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				
Unmitigated				

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	69.78 / 43.9917				
City Park	0 / 49.2082				
Elementary School	17.8099 / 45.7969				
General Office Building	31.9921 / 19.608				
Government Office Building	32.461 / 19.8954				
Regional Shopping Center	23.7032 / 14.5278				
Single Family Housing	130.569 / 82.315				
Total					

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	69.78 / 43.9917				
City Park	0 / 49.2082				
Elementary School	17.8099 / 45.7969				
General Office Building	31.9921 / 19.608				
Government Office Building	32.461 / 19.8954				
Regional Shopping Center	23.7032 / 14.5278				
Single Family Housing	130.569 / 82.315				
Total					

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				
Unmitigated				

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	492.66				
City Park	3.55				
Elementary School	798.46				
General Office Building	167.4				
Government Office Building	151.96				
Regional Shopping Center	336				
Single Family Housing	1926.36				
Total					

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	492.66				
City Park	3.55				
Elementary School	798.46				
General Office Building	167.4				
Government Office Building	151.96				
Regional Shopping Center	336				
Single Family Housing	1926.36				
Total					

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	:	:	:	:

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Others	0 / 0	:	:	:	:
Total					

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	193	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips -

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	T24E	511.12	475.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	319.12
tblEnergyUse	T24NG	9,411.72	8,752.90
tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	10,879.41
tblLandUse	GreenSpaceAllowEdit	1.00	0.00

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tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338						
Mobile	82.6839	306.8755	901.8993	3.7910	415.8068	2.0860	417.8928	111.0271	1.9391	112.9662						
Total	281.5674	322.7604	1,161.819 2	3.8860	415.8068	4.5271	420.3339	111.0271	4.3802	115.4073						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338						
Mobile	82.6839	306.8755	901.8993	3.7910	415.8068	2.0860	417.8928	111.0271	1.9391	112.9662						
Total	281.5674	322.7604	1,161.819 2	3.8860	415.8068	4.5271	420.3339	111.0271	4.3802	115.4073						

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	82.6839	306.8755	901.8993	3.7910	415.8068	2.0860	417.8928	111.0271	1.9391	112.9662						
Unmitigated	82.6839	306.8755	901.8993	3.7910	415.8068	2.0860	417.8928	111.0271	1.9391	112.9662						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,057.89	7,668.36	6500.97	26,022,768	26,022,768
City Park	78.06	939.58	691.36	780,546	780,546
Elementary School	9,477.11	0.00	0.00	21,231,004	21,231,004
General Office Building	1,985.40	442.80	189.00	4,564,803	4,564,803
Government Office Building	11,263.16	0.00	0.00	17,220,952	17,220,952
Regional Shopping Center	13,664.00	15,990.40	8076.80	26,920,417	26,920,417
Single Family Housing	19,078.08	19,859.64	17274.48	69,727,859	69,727,859
Total	62,603.70	44,900.78	32,732.61	166,468,350	166,468,350

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3
City Park	15.00	7.50	8.50	33.00	48.00	19.00	66	28	6
Elementary School	15.00	7.50	8.50	65.00	30.00	5.00	63	25	12
General Office Building	15.00	7.50	8.50	33.00	48.00	19.00	77	19	4
Government Office Building	15.00	7.50	8.50	33.00	62.00	5.00	50	34	16
Regional Shopping Center	15.00	7.50	8.50	16.30	64.70	19.00	54	35	11
Single Family Housing	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							
NaturalGas Unmitigated	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	33567.5	0.3620	3.0935	1.3164	0.0198		0.2501	0.2501		0.2501	0.2501						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Elementary School	18308.2	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364						
General Office Building	4620.82	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344						
Government Office Building	4194.68	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313						
Regional Shopping Center	3568.22	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266						
Single Family Housing	74485.2	0.8033	6.8643	2.9210	0.0438		0.5550	0.5550		0.5550	0.5550						
Total		1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338						

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	33.5675	0.3620	3.0935	1.3164	0.0198		0.2501	0.2501		0.2501	0.2501							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18.3082	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4.62082	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4.19468	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3.56822	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	74.4852	0.8033	6.8643	2.9210	0.0438		0.5550	0.5550		0.5550	0.5550							
Total		1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							

6.0 Area Detail

6.1 Mitigation Measures Area

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Unmitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE
Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	193	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips -

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	T24E	511.12	475.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	319.12
tblEnergyUse	T24NG	9,411.72	8,752.90
tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	10,879.41
tblLandUse	GreenSpaceAllowEdit	1.00	0.00

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tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338						
Mobile	60.8063	322.2385	807.9309	3.4372	415.8068	2.0963	417.9031	111.0271	1.9490	112.9760						
Total	259.6898	338.1234	1,067.8508	3.5322	415.8068	4.5374	420.3442	111.0271	4.3901	115.4172						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338						
Mobile	60.8063	322.2385	807.9309	3.4372	415.8068	2.0963	417.9031	111.0271	1.9490	112.9760						
Total	259.6898	338.1234	1,067.8508	3.5322	415.8068	4.5374	420.3442	111.0271	4.3901	115.4172						

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	60.8063	322.2385	807.9309	3.4372	415.8068	2.0963	417.9031	111.0271	1.9490	112.9760						
Unmitigated	60.8063	322.2385	807.9309	3.4372	415.8068	2.0963	417.9031	111.0271	1.9490	112.9760						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,057.89	7,668.36	6500.97	26,022,768	26,022,768
City Park	78.06	939.58	691.36	780,546	780,546
Elementary School	9,477.11	0.00	0.00	21,231,004	21,231,004
General Office Building	1,985.40	442.80	189.00	4,564,803	4,564,803
Government Office Building	11,263.16	0.00	0.00	17,220,952	17,220,952
Regional Shopping Center	13,664.00	15,990.40	8076.80	26,920,417	26,920,417
Single Family Housing	19,078.08	19,859.64	17274.48	69,727,859	69,727,859
Total	62,603.70	44,900.78	32,732.61	166,468,350	166,468,350

4.3 Trip Type Information

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3
City Park	15.00	7.50	8.50	33.00	48.00	19.00	66	28	6
Elementary School	15.00	7.50	8.50	65.00	30.00	5.00	63	25	12
General Office Building	15.00	7.50	8.50	33.00	48.00	19.00	77	19	4
Government Office Building	15.00	7.50	8.50	33.00	62.00	5.00	50	34	16
Regional Shopping Center	15.00	7.50	8.50	16.30	64.70	19.00	54	35	11
Single Family Housing	15.00	7.50	8.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							
NaturalGas Unmitigated	1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	33567.5	0.3620	3.0935	1.3164	0.0198		0.2501	0.2501		0.2501	0.2501							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18308.2	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4620.82	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4194.68	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3568.22	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	74485.2	0.8033	6.8643	2.9210	0.0438		0.5550	0.5550		0.5550	0.5550							
Total		1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	33.5675	0.3620	3.0935	1.3164	0.0198		0.2501	0.2501		0.2501	0.2501							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18.3082	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4.62082	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4.19468	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3.56822	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	74.4852	0.8033	6.8643	2.9210	0.0438		0.5550	0.5550		0.5550	0.5550							
Total		1.4963	12.9668	6.7649	0.0816		1.0338	1.0338		1.0338	1.0338							

6.0 Area Detail

6.1 Mitigation Measures Area

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Unmitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE - Sacramento Metropolitan AQMD Air District, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NewBridge Specific Plan - AQMP - UNMITIGATED BASELINE

Sacramento Metropolitan AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Concrete/Industrial Saws	Diesel	No Change	0	0	No Change	0.00
Excavators	Diesel	No Change	0	0	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)		
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.30	0.80		

No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		
No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

MITIGATED EMISSIONS OUTPUTS

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NewBridge Specific Plan - AQMP - MITIGATED
Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	193	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips - Trip Rates adjusted per DKS Report

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC and design of residences without Natural Gas infrastructure

Land Use Change -

Sequestration -

Energy Mitigation -

Water Mitigation - Based on County COA requirements

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	NT24E	3,172.76	3,396.76
tblEnergyUse	NT24E	6,155.97	6,379.97
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	T24E	511.12	3,789.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	4,659.12
tblEnergyUse	T24NG	9,411.72	0.00

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tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	0.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61

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tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	WD_TR	6.59	4.22
tblVehicleTrips	WD_TR	1.89	1.21
tblVehicleTrips	WD_TR	15.43	9.88
tblVehicleTrips	WD_TR	11.03	7.06
tblVehicleTrips	WD_TR	68.93	44.14
tblVehicleTrips	WD_TR	42.70	27.34
tblVehicleTrips	WD_TR	9.52	6.10

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Energy	0.0604	0.5491	0.4613	3.2900e-003		0.0417	0.0417		0.0417	0.0417						
Mobile	6.1896	29.8132	65.5714	0.2784	31.0761	0.1699	31.2461	8.3215	0.1579	8.4794						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
Total	41.8373	30.7271	97.6770	0.2833	31.0761	0.3876	31.4637	8.3215	0.3756	8.6971						

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	:: :: ::
Total	

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

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3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

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3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.1896	29.8132	65.5714	0.2784	31.0761	0.1699	31.2461	8.3215	0.1579	8.4794						
Unmitigated	6.1896	29.8132	65.5714	0.2784	31.0761	0.1699	31.2461	8.3215	0.1579	8.4794						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,519.62	7,668.36	6500.97	13,706,090	13,706,090
City Park	49.97	939.58	691.36	503,952	503,952
Elementary School	6,068.30	0.00	0.00	9,267,764	9,267,764
General Office Building	1,270.80	442.80	189.00	2,095,185	2,095,185
Government Office Building	7,212.48	0.00	0.00	7,529,436	7,529,436
Regional Shopping Center	8,748.80	15,990.40	8076.80	13,758,219	13,758,219
Single Family Housing	12,224.40	19,859.64	17274.48	36,627,722	36,627,722
Total	40,094.37	44,900.78	32,732.61	83,488,367	83,488,367

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3
City Park	10.17	5.08	6.61	33.00	48.00	19.00	66	28	6
Elementary School	10.17	5.08	6.61	65.00	30.00	5.00	63	25	12
General Office Building	10.17	5.08	6.61	33.00	48.00	19.00	77	19	4
Government Office Building	10.17	5.08	6.61	33.00	62.00	5.00	50	34	16
Regional Shopping Center	10.17	5.08	6.61	16.30	64.70	19.00	54	35	11
Single Family Housing	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000						
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	0.0604	0.5491	0.4613	3.2900e-003			0.0417	0.0417		0.0417	0.0417						
NaturalGas Unmitigated	0.0604	0.5491	0.4613	3.2900e-003			0.0417	0.0417		0.0417	0.0417						

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	6.6825e+006	0.0360	0.3276	0.2752	1.9700e-003		0.0249	0.0249		0.0249	0.0249							
General Office Building	1.6866e+006	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003							
Government Office Building	1.53106e+006	8.2600e-003	0.0751	0.0630	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003							
Regional Shopping Center	1.3024e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.0604	0.5491	0.4613	3.3000e-003		0.0417	0.0417		0.0417	0.0417							

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	6.6825e+006	0.0360	0.3276	0.2752	1.9700e-003		0.0249	0.0249		0.0249	0.0249							
General Office Building	1.6866e+006	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003							
Government Office Building	1.53106e+006	8.2600e-003	0.0751	0.0630	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003							
Regional Shopping Center	1.3024e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.0604	0.5491	0.4613	3.3000e-003		0.0417	0.0417		0.0417	0.0417							

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	8.56429e+006				
City Park	0				
Elementary School	4.12128e+006				
General Office Building	2.331e+006				
Government Office Building	2.11603e+006				
Regional Shopping Center	3.3888e+006				
Single Family Housing	2.53465e+007				
Total					

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	8.56429e+006				
City Park	0				
Elementary School	4.12128e+006				
General Office Building	2.331e+006				
Government Office Building	2.11603e+006				
Regional Shopping Center	3.3888e+006				
Single Family Housing	2.53465e+007				
Total					

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Unmitigated	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.3533					0.0000	0.0000		0.0000	0.0000						
Consumer Products	30.2865					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	0.9475	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Total	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.3533					0.0000	0.0000		0.0000	0.0000						
Consumer Products	30.2865					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	0.9475	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						
Total	35.5873	0.3648	31.6444	1.6800e-003		0.1759	0.1759		0.1759	0.1759						

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				
Unmitigated				

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	69.78 / 43.9917				
City Park	0 / 49.2082				
Elementary School	17.8099 / 45.7969				
General Office Building	31.9921 / 19.608				
Government Office Building	32.461 / 19.8954				
Regional Shopping Center	23.7032 / 14.5278				
Single Family Housing	130.569 / 82.315				
Total					

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	55.824 / 43.9917				
City Park	0 / 49.2082				
Elementary School	14.2479 / 45.7969				
General Office Building	25.5937 / 19.608				
Government Office Building	25.9688 / 19.8954				
Regional Shopping Center	18.9626 / 14.5278				
Single Family Housing	104.455 / 82.315				
Total					

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				
Unmitigated				

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	492.66				
City Park	3.55				
Elementary School	798.46				
General Office Building	167.4				
Government Office Building	151.96				
Regional Shopping Center	336				
Single Family Housing	1926.36				
Total					

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	492.66				
City Park	3.55				
Elementary School	798.46				
General Office Building	167.4				
Government Office Building	151.96				
Regional Shopping Center	336				
Single Family Housing	1926.36				
Total					

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	:	:	:	:

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Others	0 / 0	:	:	:	:
Total					

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NewBridge Specific Plan - AQMP - MITIGATED
Sacramento Metropolitan AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	193	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips - Trip Rates adjusted per DKS Report

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC and design of residences without Natural Gas infrastructure

Land Use Change -

Sequestration -

Energy Mitigation -

Water Mitigation - Based on County COA requirements

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	NT24E	3,172.76	3,396.76
tblEnergyUse	NT24E	6,155.97	6,379.97
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	T24E	511.12	3,789.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	4,659.12
tblEnergyUse	T24NG	9,411.72	0.00

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tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	0.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61

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tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	WD_TR	6.59	4.22
tblVehicleTrips	WD_TR	1.89	1.21
tblVehicleTrips	WD_TR	15.43	9.88
tblVehicleTrips	WD_TR	11.03	7.06
tblVehicleTrips	WD_TR	68.93	44.14
tblVehicleTrips	WD_TR	42.70	27.34
tblVehicleTrips	WD_TR	9.52	6.10

2.0 Emissions Summary

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						
Mobile	65.5267	236.7708	593.6642	2.4210	259.3485	1.3708	260.7193	69.2502	1.2738	70.5240						
Total	263.2449	242.6978	849.3467	2.4524	259.3485	3.0068	262.3553	69.2502	2.9099	72.1600						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						
Mobile	65.5267	236.7708	593.6642	2.4210	259.3485	1.3708	260.7193	69.2502	1.2738	70.5240						
Total	263.2449	242.6978	849.3467	2.4524	259.3485	3.0068	262.3553	69.2502	2.9099	72.1600						

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	65.5267	236.7708	593.6642	2.4210	259.3485	1.3708	260.7193	69.2502	1.2738	70.5240						
Unmitigated	65.5267	236.7708	593.6642	2.4210	259.3485	1.3708	260.7193	69.2502	1.2738	70.5240						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,519.62	7,668.36	6500.97	13,706,090	13,706,090
City Park	49.97	939.58	691.36	503,952	503,952
Elementary School	6,068.30	0.00	0.00	9,267,764	9,267,764
General Office Building	1,270.80	442.80	189.00	2,095,185	2,095,185
Government Office Building	7,212.48	0.00	0.00	7,529,436	7,529,436
Regional Shopping Center	8,748.80	15,990.40	8076.80	13,758,219	13,758,219
Single Family Housing	12,224.40	19,859.64	17274.48	36,627,722	36,627,722
Total	40,094.37	44,900.78	32,732.61	83,488,367	83,488,367

4.3 Trip Type Information

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3
City Park	10.17	5.08	6.61	33.00	48.00	19.00	66	28	6
Elementary School	10.17	5.08	6.61	65.00	30.00	5.00	63	25	12
General Office Building	10.17	5.08	6.61	33.00	48.00	19.00	77	19	4
Government Office Building	10.17	5.08	6.61	33.00	62.00	5.00	50	34	16
Regional Shopping Center	10.17	5.08	6.61	16.30	64.70	19.00	54	35	11
Single Family Housing	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							
NaturalGas Unmitigated	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18308.2	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4620.82	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4194.68	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3568.22	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18.3082	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4.62082	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4.19468	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3.56822	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Unmitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction

8.0 Waste Detail

8.1 Mitigation Measures Waste

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Summer

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	180.00	1000sqft	13.80	180,000.00	0
Government Office Building	163.40	1000sqft	2.50	163,400.00	0
Elementary School	614.20	1000sqft	9.40	614,200.00	0
City Park	41.30	Acre	41.30	1,799,028.00	0
Apartments Low Rise	1,071.00	Dwelling Unit	44.30	1,071,000.00	2860
Single Family Housing	2,004.00	Dwelling Unit	330.70	3,607,200.00	5351
Regional Shopping Center	320.00	1000sqft	24.70	320,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2032
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	193	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 Intensity Updated Based on SMUD's progress towards RPS

Land Use - based on the land use summary for the project (Assumed FAR=1.5 for school and fire station)

Construction Phase - construction emissions not included

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Architectural Coating -

Vehicle Trips - Trip Rates adjusted per DKS Report

Area Coating -

Energy Use - Title 24 Energy Intensity adjusted per 2019 CBSC and design of residences without Natural Gas infrastructure

Land Use Change -

Sequestration -

Energy Mitigation -

Water Mitigation - Based on County COA requirements

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	500.00	1.00
tblEnergyUse	NT24E	3,172.76	3,396.76
tblEnergyUse	NT24E	6,155.97	6,379.97
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	T24E	511.12	3,789.42
tblEnergyUse	T24E	2.05	1.44
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24E	3.26	2.28
tblEnergyUse	T24E	678.97	4,659.12
tblEnergyUse	T24NG	9,411.72	0.00

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tblEnergyUse	T24NG	14.60	10.22
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	12.42	8.69
tblEnergyUse	T24NG	4.49	3.14
tblEnergyUse	T24NG	23,147.69	0.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	LotAcreage	4.13	13.80
tblLandUse	LotAcreage	3.75	2.50
tblLandUse	LotAcreage	14.10	9.40
tblLandUse	LotAcreage	66.94	44.30
tblLandUse	LotAcreage	650.65	330.70
tblLandUse	LotAcreage	7.35	24.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	193
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CC_TL	5.00	5.08
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61

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tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CNW_TL	6.50	6.61
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	CW_TL	10.00	10.17
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HO_TL	6.50	6.61
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HS_TL	5.00	5.08
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	HW_TL	10.00	10.17
tblVehicleTrips	WD_TR	6.59	4.22
tblVehicleTrips	WD_TR	1.89	1.21
tblVehicleTrips	WD_TR	15.43	9.88
tblVehicleTrips	WD_TR	11.03	7.06
tblVehicleTrips	WD_TR	68.93	44.14
tblVehicleTrips	WD_TR	42.70	27.34
tblVehicleTrips	WD_TR	9.52	6.10

2.0 Emissions Summary

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						
Mobile	46.4638	245.7530	549.1829	2.1955	259.3485	1.3798	260.7283	69.2502	1.2825	70.5327						
Total	244.1821	251.6801	804.8654	2.2270	259.3485	3.0159	262.3644	69.2502	2.9185	72.1687						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Energy	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						
Mobile	46.4638	245.7530	549.1829	2.1955	259.3485	1.3798	260.7283	69.2502	1.2825	70.5327						
Total	244.1821	251.6801	804.8654	2.2270	259.3485	3.0159	262.3644	69.2502	2.9185	72.1687						

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

4.0 Operational Detail - Mobile

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	46.4638	245.7530	549.1829	2.1955	259.3485	1.3798	260.7283	69.2502	1.2825	70.5327						
Unmitigated	46.4638	245.7530	549.1829	2.1955	259.3485	1.3798	260.7283	69.2502	1.2825	70.5327						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,519.62	7,668.36	6500.97	13,706,090	13,706,090
City Park	49.97	939.58	691.36	503,952	503,952
Elementary School	6,068.30	0.00	0.00	9,267,764	9,267,764
General Office Building	1,270.80	442.80	189.00	2,095,185	2,095,185
Government Office Building	7,212.48	0.00	0.00	7,529,436	7,529,436
Regional Shopping Center	8,748.80	15,990.40	8076.80	13,758,219	13,758,219
Single Family Housing	12,224.40	19,859.64	17274.48	36,627,722	36,627,722
Total	40,094.37	44,900.78	32,732.61	83,488,367	83,488,367

4.3 Trip Type Information

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3
City Park	10.17	5.08	6.61	33.00	48.00	19.00	66	28	6
Elementary School	10.17	5.08	6.61	65.00	30.00	5.00	63	25	12
General Office Building	10.17	5.08	6.61	33.00	48.00	19.00	77	19	4
Government Office Building	10.17	5.08	6.61	33.00	62.00	5.00	50	34	16
Regional Shopping Center	10.17	5.08	6.61	16.30	64.70	19.00	54	35	11
Single Family Housing	10.17	5.08	6.61	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
City Park	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Elementary School	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
General Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Government Office Building	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Regional Shopping Center	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591
Single Family Housing	0.578082	0.034340	0.212238	0.105207	0.011464	0.004381	0.018498	0.025846	0.001862	0.001454	0.005431	0.000606	0.000591

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						
NaturalGas Unmitigated	0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287						

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18308.2	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4620.82	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4194.68	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3568.22	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Elementary School	18.3082	0.1974	1.7949	1.5077	0.0108		0.1364	0.1364		0.1364	0.1364							
General Office Building	4.62082	0.0498	0.4530	0.3805	2.7200e-003		0.0344	0.0344		0.0344	0.0344							
Government Office Building	4.19468	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313							
Regional Shopping Center	3.56822	0.0385	0.3498	0.2939	2.1000e-003		0.0266	0.0266		0.0266	0.0266							
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							
Total		0.3310	3.0090	2.5276	0.0181		0.2287	0.2287		0.2287	0.2287							

6.0 Area Detail

6.1 Mitigation Measures Area

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Unmitigated	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	23.8536					0.0000	0.0000		0.0000	0.0000						
Consumer Products	165.9533					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	7.5803	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						
Total	197.3872	2.9181	253.1550	0.0134		1.4074	1.4074		1.4074	1.4074						

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction

8.0 Waste Detail

8.1 Mitigation Measures Waste

NewBridge Specific Plan - AQMP - MITIGATED - Sacramento Metropolitan AQMD Air District, Winter

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NewBridge Specific Plan - AQMP - MITIGATED
Sacramento Metropolitan AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Concrete/Industrial Saws	Diesel	No Change	0	0	No Change	0.00
Excavators	Diesel	No Change	0	0	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000						

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.30	0.80		

No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		
No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
Yes	Turf Reduction	20.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

ELECTRICITY EMISSIONS CALCULATIONS

Unmitigated Energy Use	
	kWh/yr
Apartments Low Rise	4775090.00
Single Family Housing	1620020.00
Elementary School	4121280.00
General Office Building	2331000.00
Government Office	2116030.00
Regional Shopping Center	3388800.00
Total	18,352,220.00
NOx emissions (lbs/yr)	1064.43
NOx emissions added to CalEEMod emissions estimate (tons/yr)	0.53221438
CalEEMod Estimated Total Emissions	50.9564
Estimated Total Emissions with NOx from Electricity	51.48861438

Electricity Use Considering No Natural Gas (Residential Only)	
	kWh/yr
Apartments Low Rise	8564290.00
Single Family Housing	25346400.00
Elementary School	4121280.00
General Office Building	2331000.00
Government Office	2116030.00
Regional Shopping Center	3388800.00
Total	33,910,690.00
NOx emissions (lbs/yr)	1966.82
NOx emissions added to CalEEMod emissions estimate (tons/yr)	0.98341001
CalEEMod Estimated Total Emissions	30.6077
Estimated Total Emissions with NOx from Electricity	31.59111001

SMAQMD NOx intensity factor = 0.058 lbs/MWh (or 0.000058 lbs/kWh) for all sources in SFNA
0.000058 lbs/kwh

Source: Ramboll Environ. Assessment of SMUD Nox Intensity Analysis: Final Report. October 1, 2015.

Energy Related Nox Emissions (tons/yr)		
	Unmitigated	Mitigated
Electricity	0.53221438	0.98341001
Natural Gas Res	0.2127	0
Natural Gas Non-Res	0.5492	0.5491
total	0.74491438	0.98341001